

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Wireless Operations in the 3650-3700 MHz)	ET Docket No. 04-151
Band)	
)	WT Docket No. 05-96
Rules for Wireless Broadband Services in the)	
3650-3700 MHz Band)	
)	ET Docket No. 02-380
Additional Spectrum for Unlicensed Devices)	
Below 900 MHz and in the 3 GHz Band)	
)	ET Docket No. 98-237
Amendment of the Commission's Rules With)	
Regard to the 3650-3700 MHz Government)	
Transfer Band)	

To: The Commission

COMMENTS OF AIRSTREAM DATA LLC

AirStream Data LLC ("AirStream"), by its attorneys and pursuant to Public Notice Report No. 2722, released July 18, 2005, and Section 1.429(f) of the Commission's Rules, 47 C.F.R. § 1.429(f), hereby files its comments on the petitions for reconsideration filed on June 10, 2005 in the captioned docket. As discussed below, AirStream supports shared use licensing and opposes exclusive licensing of the 3650-3700 MHz band. In recognition of the issues raised by the various petitioners regarding the feasibility of using a contention-based protocol in this band, AirStream proposes an alternative licensing approach whereby all applicants who apply for licenses in each market by a particular deadline would be licensed for that market. Instead of being required to use a contention-based protocol, the licensees would be required to work out among themselves the methodology for avoiding interference in the market.

AirStream is a business class provider of Wireless Broadband, VoIP over Wireless, VPN and security solutions to the residential, small/medium business and enterprise business markets. AirStream has customers ranging from single site customers relying on AirStream for voice, data and security, to Fortune 500 clients relying on AirStream for redundancy. AirStream currently utilizes unlicensed spectrum at 5 GHz to provide its services. However, it would like to utilize spectrum at 3650 – 3700 MHz in the manner described below to further its offerings and capabilities. AirStream currently covers several hundred thousand businesses and several million households in the Dallas/Fort Worth Metroplex, with plans to cover 48 major markets and 120 rural markets nationwide in the next several years.

I. Background

In its Report and Order and Memorandum Opinion and Order (“Report and Order”), FCC 05-56, released March 16, 2005, the Commission allocated the 3650-3700 MHz spectrum to be licensed for broadband access on a non-exclusive basis. Nationwide licenses are issued on a non-exclusive basis with no limit on the number of licenses. Each licensee must register its fixed and base stations before commencing operations. License terms are ten years, and since the licenses are non-exclusive, there are no build-out or other performance requirements. Licensees are required to work with each other to prevent interference, and a contention-based protocol must be used to avoid transmitting interfering signals. Operations are not permitted within 150 km radii exclusion zones around each incumbent earth station, unless the earth station operator consents, and earth station operators must negotiate with the broadband licensees in good faith. In addition operations within 80 km of three Federal Government radio location stations must be coordinated with NTIA.

Eight petitions for reconsideration were filed.¹ EWA, Redline, Motorola, the Joint Petitioners, WCA and the WiMAX Forum each opposed the FCC mandating a contention-based protocol. They explained that a contention-based protocol works well for low power operations such as Wi-Fi, but does not work well for the higher power operations permitted at 3650 MHz, because the transmitters and receivers are too far apart to detect operations at a distant receiver that must be protected from interference. EWA proposes that the FCC instead simply require that the industry work out interference protection procedures. WCA and the WiMAX Forum request that the Commission require a co-existence protocol instead of a contention-based protocol. In the event that the FCC keeps the contention-based protocol requirement, Redline requests that the FCC clarify that the IEEE 802.16 standard satisfies the contention-based protocol requirement.

The Joint Petitioners argue that the site registration procedures will lead to “squatting” that will tie up the 3650 MHz spectrum. WCA believes that the site registration procedures will not prevent interference and suggests that those who register their sites first ought to have interference protection rights. WCA also proposes that new registrants notify registered site owners within 50 miles, and that the Commission strictly require that those who cease using any registered locations to delete them from the FCC database within 120 days. The Joint Petitioners also favor deletion of site registrations for unused locations.

¹ The following parties filed petitions for reconsideration: BRN Phoenix, Inc. (“BRN”); Enterprise Wireless Alliance (“EWA”); Intel Corporation, Redline Communications Inc., and Alvarion, Inc. filing jointly (the “Joint Petitioners”); Motorola, Inc. (“Motorola”); Redline Communications Inc. filing separately (“Redline”); Satellite Industry Association (“SIA”); WiMAX Forum; and Wireless Communications Association International, Inc. (“WCA”).

The Joint Petitioners, Motorola and Redline propose that the FCC exclusively license by auction two 25 MHz frequency blocks in the top 50 Metropolitan Statistical Areas (“MSAs”), but continue to have non-exclusive licensing in the other less densely populated areas. WCA proposes that the Commission exclusively license by auction one 25 MHz block in each MSA and Rural Service Area (“RSA”), and provide for non-exclusive licensing in the other 25 MHz block.

WCA and the WiMAX Forum each suggest that the Commission adopt the Part 101 frequency coordination procedures to permit broadband operations within 150 km of satellite earth stations. They argue that without such procedures, the satellite earth station operators will stonewall negotiations initiated by the broadband operators for use of the exclusion zones. Parties also asked for reconsideration regarding power limits and out of band emissions in their petitions; however, AirStream will not address those two issues in its comments.

II. AirStream’s Proposal for Licensing and Preventing Interference

AirStream opposes the exclusive licensing proposals advocated by the Joint Petitioners, Motorola, Redline and WCA. The vast majority of available spectrum is allocated to exclusive licensed services. Significant amounts of exclusive spectrum will be auctioned in the next few years in the 1.7/2.1 GHz (90 MHz of spectrum), 2 GHz (20 MHz of spectrum) and 700 MHz (60 MHz of spectrum) bands. In addition, after the Broadband Radio Service and Educational Broadband Service rebanding process is completed, 152 MHz of licensed spectrum will be available for development in the upper and lower segments of the 2.5 GHz band. On the other hand, only small amounts of spectrum represent opportunities for relatively high powered non-exclusive use. This is the first band that the Commission has allocated for non-exclusive use at

the power levels adopted in this docket. Therefore, the 3650-3700 MHz band presents the first opportunity for the industry to develop methodologies for co-existing higher power users.

Non-exclusive use permits many smaller companies who have not been successful in obtaining auctioned spectrum when competing against the well-funded larger companies to innovate in the provision of broadband services to the public. In its efforts to encourage a multiplicity of spectrum use methodologies and to encourage a wide variety of spectrum users, including small businesses and businesses owned by members of minority groups and women as mandated by Section 309(j) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(j), the Commission should not back away from non-exclusive use for this band. In fact, the Report of the Wireless Broadband Access Task Force, GN Docket No. 04-163, February 2005, specifically recognized that the combined policies of providing for more spectrum for unlicensed devices together with greater flexibility in the technical rules have “spawned and are continuing to foster innovative wireless broadband technologies and consumer services.” *Id.* at 56. These same benefits will result from shared use spectrum at 3650-3700 MHz.

AirStream is mindful of the petitions for reconsideration which argue that a contention-based protocol would not be workable at the power levels permitted by the Commission at 3650-3700 MHz. For this reason, AirStream proposes an alternative licensing approach that would call for non-exclusive use accompanied by a requirement that licensees in each market work out a methodology to avoid interference.

Specifically, AirStream proposes that the Commission set a deadline for parties to apply for non-exclusive licenses on a market by market basis.² To encourage small businesses to participate, to promote a wide variety of innovative solutions, and to specifically encourage

² To simplify the application process, the application form should permit listing multiple markets in one application, not unlike the way it is now done for auctioned licenses.

development of broadband service in rural areas, AirStream proposes that the Commission use Metropolitan Statistical Areas (“MSAs”) and Rural Service Areas (“RSAs”) for its market definitions. By using MSAs and RSAs, applicants who are particularly interested in serving rural areas will apply for the RSAs.

Each applicant that applies by the deadline and meets the basic qualifications would be licensed. Once the licensing process is completed, all of the licensees for all of the markets would be required to develop an agreement on the methodology to be used to prevent the licensees from causing interference to each other. Issues that are common to all markets, such as technological and other general procedures to avoid interference would be resolved in a nationwide agreement in which all parties would participate. However, to the extent that interference is to be resolved by agreements regarding transmitter site placement and to the extent there are other interference resolution matters that are market-specific, those issues would be resolved on a market-by-market basis. A copy of the nationwide agreement as well as copies of any market-specific agreements would be filed with the Commission. If the licensees cannot agree by a particular deadline set by the Commission, they would be required to participate in a mediation process conducted by the Commission.

Once the agreement to prevent interference is filed with the Commission, licensees would be free to construct and operate pursuant to the agreement. Site registration procedures would still be used, but the requirement to reach an agreement to avoid interference would render moot the reconsideration proposals of the Joint Petitioners and WCA regarding site registration. Because the number of licensees in each market would be fixed as of the application filing deadline, secondary market transactions, including assignments and transfers of control and

spectrum leasing, should be permitted. For the same reason, licensees should be subject to a substantial service requirement on a market-by-market basis at the time of license renewal.


AirStream supports the proposals by WCA and the WiMAX Forum to adopt the Part 101 frequency coordination procedures to permit broadband operations within 150 km of satellite earth stations. The Part 101 procedures provide an objective means of determining whether there would be potential interference. Without those procedures, satellite earth station incumbents would have no incentive to negotiate in good faith and would have the ability to stonewall provision of service in the 3650 MHz band exclusion zones.

III. Conclusion

For the reasons stated herein, AirStream Data LLC respectfully requests the Commission to adopt an alternative licensing approach whereby all applicants who apply for licenses in each market by a particular deadline would be licensed for that market. Instead of being required to use a contention-based protocol, the licensees would be required to work out among themselves the methodology for avoiding interference in the market.

Respectfully submitted,

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August 11, 2005

CERTIFICATE OF SERVICE

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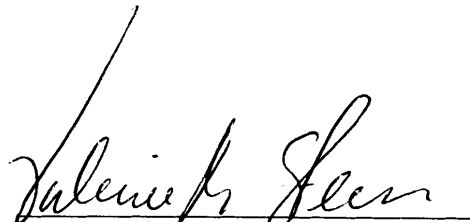
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